

FLUE GAS DESULFURIZATION PROCESS AND APPARATUS FOR REMOVING NITROGEN OXIDES

Abstract of Disclosure

An apparatus and process for removing acidic gases and NO_x from flue gases produced by utility and industrial plants. The process and apparatus convert NO_x, and particularly nitric oxide, to nitrogen dioxide, which is then reacted to form a valuable byproduct. The process generally entails contacting a flue gas with a scrubbing medium to absorb acidic gases from flue gas and produce an intermediate flue gas. The intermediate flue gas is then cooled to cause nitric oxide present therein to be oxidized to form nitrogen dioxide, which is then absorbed from the flue gases to produce a nitrogen dioxide-containing solution and a scrubbed flue gas. The nitrogen dioxide in the nitrogen dioxide-containing solution is then reacted with ammonium hydroxide to form ammonium nitrate as a valuable byproduct.

10064055

Figures

Figure 1: A vertical column of small, illegible text or symbols, possibly a list or index, located on the left side of the page.